

WHAT IS CLAIMED IS:

1. A method for warning a user of a low-voltage state of a mobile communication terminal, comprising the steps of:

- a) pre-storing a low-voltage alarm message in a memory;
- 5 b) checking a voltage level of a battery in a call connection mode; and
- c) if the voltage level of the battery is lower than a predetermined voltage, reading the low-voltage alarm message from the memory, and transmitting the read low-voltage alarm message to a called terminal communicating with the mobile communication terminal.

10 2. The method as set forth in claim 1, wherein step (c) includes the steps of:

recognizing a phone number of the called terminal; and
transmitting the low-voltage alarm message using a SMS (Short Message Service) message.

15 3. The method as set forth in claim 1, wherein the low-voltage alarm message is a voice message such as a Voice OGM (Out-Going Message).

4. The method as set forth in claim 1, wherein the low-voltage alarm message is one of a SMS message or a Voice OGM message, and

wherein step (c) includes the steps of:
selecting one of the SMS message and the Voice OGM message;
20 if the SMS message is selected, transmitting the low-voltage alarm message to the called mobile communication terminal using the SMS message; and
if the Voice OGM message is selected, transmitting the Voice OGM message to the called terminal through a traffic channel.

25 5. The method as set forth in claim 4, wherein step (c) further includes the steps of:

recognizing a phone number of the called terminal; and

if the phone number of the called terminal is not recognized, selecting the Voice OGM message to be the low-voltage alarm message.

6. The method as set forth in claim 4,
wherein step (c) includes the steps of:
 - 5 recognizing a phone number of the called terminal;
 - determining whether the phone number of the called terminal is a mobile communication phone number or a fixed line phone number; and
 - if the phone number of the called terminal is a mobile communication phone number, transmitting the SMS message to the called terminal as the low-voltage alarm message.

7. The method as set forth in claim 6, wherein step (c) further includes the step of:
 - of:
 - if the phone number of the called terminal is determined to be a fixed line phone number, transmitting the Voice OGM message as the low-voltage alarm message to the 15 called terminal through a traffic channel.

8. The method as set forth in claim 1, further comprising the step of:
 - d) after transmitting the low-voltage alarm message, cutting off a voltage received from the battery.

9. The method as set forth in claim 4, further comprising the step of:
 - 20 previously preparing a Voice OGM message written in languages of a plurality of countries as the low-voltage alarm message, and
 wherein step (c) includes the steps of:
 - recognizing a phone number of the called terminal;
 - determining whether the phone number of the called terminal is a domestic 25 phone number or an international phone number; and
 - if the phone number of the called terminal is an international phone number, reading from the memory a Voice OGM message in a language of a country

corresponding to the international phone number as the low-voltage alarm message, and transmitting the read Voice OGM message over a traffic channel.

10. A mobile communication terminal apparatus, comprising:
 - a voltage detector for detecting a battery voltage;
 - 5 a message storage unit for storing a low-voltage alarm message therein; and
 - a controller for transmitting the low-voltage alarm message to a called terminal when the battery voltage is lower than a predetermined voltage.
11. The apparatus as set forth in claim 10, wherein the low-voltage alarm message is a SMS (Short Message Service) message.
- 10 12. The apparatus as set forth in claim 10, wherein the low-voltage alarm message is a Voice OGM (Out-Going Message) message.
13. The apparatus as set forth in claim 10, wherein the controller determines whether a phone number of the called terminal is a mobile communication phone number or a fixed line phone number, transmits a SMS 15 message as the low-voltage alarm message when the phone number of the called terminal is a mobile communication phone number, and transmits a Voice OGM message as the low-voltage alarm message when the phone number of the called terminal is a fixed line phone number.
- 20 14. The apparatus as set forth in claim 13, wherein the message storage unit stores a Voice OGM message written in languages of a plurality of countries prior to a call, and the controller determines whether the phone number of the called terminal is a domestic phone number or an international phone number, reads a Voice OGM message of a corresponding country from the memory storage unit if the phone number of the 25 called terminal is determined to be an international phone number, and transmits the read Voice OGM message as the low-voltage alarm message.

15. The apparatus as set forth in claim 10, wherein the controller transmits a Voice OGM message as the low-voltage alarm message when a phone number of the called terminal is not recognized.